Before the
Federal Communications Commission
Washington, D.C. 20054

In the Matter of	)	
	)	
Transition from TTY to Real-Time Text Technology	)	CG Docket No. 16-145
	)	
	)	
Petition for Rulemaking to Update the Commission's Rules for Access to Support the Transition from TTY to Real-Time Text Technology, and Petition for Waiver of Rules Requiring Support of TTY Technology	)	GN Docket No. 15-178
	)	
	)	

COMMENTS

AMERICAN CABLE ASSOCIATION

I. INTRODUCTION

The American Cable Association ("ACA") hereby submits comments in response to the Notice of Proposed Rulemaking in this proceeding in which the Federal Communications Commission ("Commission") is proposing to amend its rules to "facilitate a transition from outdated text telephone (TTY) technology to a reliable and interoperable means of providing real-time text (RTT) communication for people who are deaf, hard of hearing, speech disabled, and deaf-blind over Internet Protocol (IP) enabled networks…."[1]

[1] *Transition from TTY to Real-Time Text Technology*, CG Docket No. 16-145, *Petition for Rulemaking to Update the Commission's Rules for Access to Support the Transition from TTY to Real-Time Text Technology, and Petition for Waiver of Rules Requiring Support of TTY Technology*, GN Docket No. 15-178, Notice of Proposed Rulemaking, FCC 16-53 (rel. April 29, 2016), 81 Fed. Reg. 33170 ("NPRM") at ¶1.

ACA represents approximately 750 smaller providers of voice, broadband Internet access, and video programming services, including cable operators, incumbent telephone companies and municipal utilities, most of whom serve smaller communities and rural areas. In the aggregate, these operators serve nearly seven million subscribers, but individually, the vast majority of ACA members serve fewer than 5,000 subscribers, and half serve fewer than 1,000 subscribers. All ACA members offering phone service support TTY technology either over circuit switched or VoIP networks.

The Commission's NPRM is primarily focused on amending the Commission's rules to address the obligations of wireless service providers and wireless equipment manufacturers to support communications by the disabled, and to shift the obligations of these wireless entities from supporting TTY to supporting "RTT over IP-based wireless voice services."[2] ACA understands the Commission's focused and expedited efforts to transition the wireless industry to an RTT solution, since, as wireless carriers transition to all IP-based wireless services, "TTY connectivity cannot be reliably achieved" over WiFi calling or VoLTE-only networks.[3] This is a stumbling block that the Commission has previously recognized in granting TTY waivers to AT&T, Verizon, and other wireless carriers.[4]

While the majority of the discussion in the NPRM focuses on adoption of RTT by the wireless industry, the Commission also queries whether wireline providers should similarly adopt an RTT standard for their networks. Given that TTY technology is compatible with and works effectively for all wireline providers, including those operating wireline VoIP systems -- a

[2] NPRM at ¶2.
[3] *Revised Petition of Competitive Carriers Association for a Waiver*, GN Docket No. 15-178 at 3-5 (April 8, 2016)("CCA Waiver Petition").
[4] *In the Matter of Petition for Waiver of Rules Requiring Support of TTY Technology,* Order, 30 FCC Rcd 10855, 10859-61, 10866, ¶¶10-13, 23 10-13, 23 (2015)("ATT Waiver Order"); Order, *In the Matter of Petition for Waiver of Rules Requiring Support of TTY Technology, Competitive Carriers Association*, Order, 31 FCC Rcd 3778, 3783 at ¶¶14-15 (2016) ("CCA Waiver Order"). In granting these waivers, the Commission recognized: (1) the "very low level of wireless usage of TTYs"; (2) consumers' reliance on SMS text messaging for access on wireless networks, (3) the "significant burdens on [wireless] carriers" of the TTY support requirements; (4) the "limited, unreliable benefits to consumers" of TTY; and (5) the alternative means available for disabled consumers to reach 911.

set of facts that does not apply with regard to the wireless industry -- the Commission need not rush its decision-making regarding the wireline industry's support of RTT. Not rushing is particularly sensible because very few wireline providers (almost certainly no smaller providers among them) and none of ACA's known wireline equipment providers, have any significant knowledge of RTT technology and how it could or would work within their networks. In fact, ACA is unaware of any wireline providers, other than Verizon and AT&T, having any involvement in the current RTT standard-setting process, and these large carriers are involved because of their ownership of wireless assets. In these comments, ACA responds to the Commission's inquiries, but for the above reasons and others, the Commission should delay further consideration until more information is available to determine to what extent RTT is "readily achievable" by wireline providers, as the Commission's statutory authority requires.[5] By deferring consideration, the Commission can focus on the wireless industry, which is increasingly dominating the provision of voice services to U.S. consumers today. This market trend, combined with the facts that consumers are increasingly utilizing smart phones and various RTT-like services are available on broadband networks via Internet applications, mitigates any possible impact on consumers of delaying consideration of RTT implementation for the wireline industry.

II. WIRELINE PROVIDERS ARE SUPPORTING TTY EFFECTIVELY TO DATE

Unlike the wireless industry, all wireline providers, including ACA members who have deployed VoIP or circuit switched telephone services over their wireline networks, are supporting TTY services effectively for their TTY users. ACA has polled its members and is unaware of any complaints its members have received from voice customers regarding their inability to complete TTY calls over their wireline networks, including their VoIP networks. This is most likely because wireline networks, including VoIP networks, are technically capable of

[5] 47 USC § 255(a)(2) (incorporating by reference the ADA definition of the term, 42 USC §12181(9)). For example, the Commission recognizes that "wireline part 68 customer premise equipment such as wired and cordless phones currently cannot readily support real-time text…." NPRM at ¶¶25, 78.

supporting traditional TTY services. This conclusion is supported by technical data reported by Cisco Systems and other leading IP communications system providers demonstrating that "properly engineered and implemented IP networks" enable "reliable Voice/TTY" over VoIP networks without packet loss.[6] Therefore, TTY works as a viable solution for the disabled who use ACA members' wireline networks, including those running IP-based wireline voice networks.

III. THE WIRELINE INDUSTRY HAS HAD NO INVOLVEMENT IN STANDARDS SETTING FOR RTT USE AND IS LARGELY UNFAMILIAR WITH RTT TECHNOLOGY

As the NPRM and recent wireless industry TTY waiver activity makes clear, RTT is a wireless industry-driven solution. To date, the standards setting process for RTT has been primarily the domain of large national wireless providers, who continue to work with the Alliance for Telecommunications Industry Solutions ("ATIS") to develop standards for RTT technology deployment in wireless networks. Unlike the larger wireless carriers, the wireline industry has not been actively engaged in RTT standards setting bodies. As a consequence, the wireline industry, and particularly small wireline providers who are members of ACA, have no knowledge of the challenges, costs, and burdens of implementing RTT. Compounding the problem of determining whether wireline providers could support RTT are the wireless industry's delays in finalizing RTT standards. Recently the largest wireless providers, who have been leading the standards setting process, conceded that wireless industry RTT standards are still "under development", and that the proposed interim solution of an RTT OTT application is only beginning testing in July 2016.[7] And the largest national wireless carriers will not be in a position to implement an embedded RTT technology solution before 2018 at the earliest, depending on the development of standards and manufacturers' equipment delivery cycles.[8]

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[6] Cisco Systems, Inc. "TTY & TTD Over VoIP: Dispelling the 'Packet Loss' Myth" (May, 2004), http://www.cisco.com/wwl/regaffairs/images/pdf/Dispelling_the_Packet_Loss_Myth.pdf (reviewed July 7, 2016).

[7] Status Report of AT&T, *In the Matter of Petition for Waiver of Rules Requiring Support of TTY Technology, IP-Voice Accessibility Status Report of AT&T*, GN Docket No. 15-78 (filed April 6, 2016).

[8] *Id*.

IV. THE COMMISSION SHOULD DEFER CONSIDERATION OF WHETHER WIRELINE PROVIDERS COULD SUPPORT RTT TECHNOLOGY

The Commission should defer consideration of whether wireline providers could support RTT technology. First, unlike the wireless industry, which is transitioning to VoLTE, VoWiFi and other services on all-IP wireless networks that do not support TTY, wireline providers are supporting TTY transmissions without complaints from customers. Thus, the problem that requires the Commission to act promptly does not exist for wireline providers. Second, given the lack of representation of wireline providers on the RTT standards setting organization and the fact that even wireless RTT standards have not been finalized, the wireline industry does not have the knowledge to even begin to evaluate what would be required to support RTT in a wireline environment. However, ACA would expect that requiring wireline providers to support RTT would be disproportionately burdensome for smaller providers, given most technology mandates are more onerous for smaller providers. For these two reasons, the public interest would be served to defer consideration of whether, when and how wireline providers should support RTT technology.

V. THE COMMISSION IS RIGHT TO FOCUS ON THE WIRELESS INDUSTRY AT THIS TIME GIVEN MARKET TRENDS, WHICH ALSO MITIGATE ANY IMPACT OF DEFERRING CONSIDERATION FOR WIRELINE PROVIDERS.

The Commission is correct to focus its time and attention on considering appropriate rules that apply to the wireless industry given the growth of the industry compared to the wireline industry, the general public's increased use of smart phones, and the availability of apps that provide RTT-like functionality over broadband networks. These market realities mitigate any impact of deferring consideration for wireline providers.

The Commission should take into account that consumers are presently relying on Internet-based messaging applications that can provide similar and in some cases better functionality as RTT, over all broadband networks. Applications such as Beam Messenger, which markets itself as a messaging app that "allows you to see what the other person is

texting, letter by letter" provide consumers with an RTT solution over broadband.[9] Similarly, messaging application Textter offers a "Live Messaging System" which "allows users to text in real-time."[10] Although not perfect substitutes for the RTT technology that the Commission wants the wireless industry to support, these readily-available applications provide RTT-like functionality for consumers on devices operating over broadband networks.

Most fundamentally, over the past twenty years, the voice services market has been transformed from one dominated by wireline providers to one dominated by wireless providers. As of 2013, the Commission reported that there was a growing market of 311 million mobile wireless subscribers.[11] That number dwarfs the shrinking wireline market of only 85 million customers, which has seen a further 27 percent decline in customers since 2010 and which continues to decline.[12] 48.3 percent of all residential households have cut the wireline cord and are wireless only.[13] And according to the Pew Research Center, 92 percent of Americans own a cell phone and 68 percent own a smartphone.[14] These statistics confirm that the vast majority of all Americans have access to mobile services via a smartphone or tablet, or desktop computer (and broadband service) for access to text-based accessibility solutions, whether through over-the-top applications or "plug-ins" for RTT on end user devices, SMS, instant messaging and similar chat-type functions, or email. Indeed, the Commission recognizes that the disabled also rely on SMS, instant messaging applications and email to communicate,

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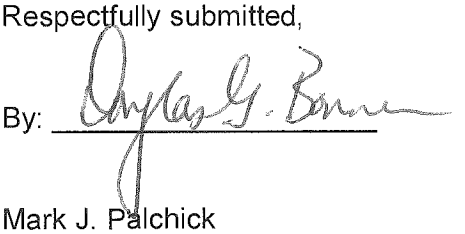
[9] Beam Messenger: Real Time Text, available at https://play.google.com/store/apps/details?id=com.beamlab.beam (reviewed July 7, 2016).
[10] Textter, available at http://www.textter.com/ (reviewed July 7, 2016).
[11] Federal Communications Commission, *Local Telephone Competition: Status as of December 31, 2013*, at 1, Figure 1 (October 2014), *available at* https://www.fcc.gov/general/local-telephone-competition-reports.
[12] *Id*.
[13] *See* Annual Wireless Industry Survey, CTIA.org, *available at* http://www.ctia.org/your-wireless-life/how-wireless-works/annual-wireless-industry-survey (last viewed July 8, 2016) www.ctia.org; *see also*, Centers for Disease Control, *Wireless Substitution: Early Release of Estimates from the National Health Interview Survey, July-December 2013*, at 1 (rel. July 8, 2014), *available at* http://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless201407.pdf (last viewed July 8, 2016).
[14] See Americans' Views On Mobile Etiquette, Pew Research Center, August 26, 2015 *available at* http://www.pewinternet.org/2015/08/26/americans-views-on-mobile-etiquette/ (last viewed July 8, 2016); *see also*, Home Broadband 2015, Pew Research Center, December 21, 2015 *available at* http://www.pewinternet.org/2015/12/21/home-broadband-2015/ (last viewed July 8, 2016).

though perhaps not in real time, including for access to 911 services.[15] The NPRM thus appropriately focuses on text-based accessibility solutions for the wireless subscriber market, which is by far the largest market for disabled users, and which is confronting technology challenges to being able to continue to support TTY as it transitions to all-IP wireless networks.

VI. CONCLUSION

For the foregoing reasons, ACA and its members request that the Commission defer consideration of whether wireline providers can support RTT.

Respectfully submitted,

By: 

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[15] NPRM, ¶¶ 27-30.